Technical Specification Group Services and System Aspects ***GTT(01)0029***
Global Text Telephony Workshop, Dusseldorf, Germany, 18-19 April 2001

Source: **Drafting Group (GTT ad hoc)**

Title: **E911 support of CTM**

Document for: **Discussion**

Agenda Item: **5**

This contribution focuses on the FCC requirements for the treatment of Baudot code Text Telephony for emergency 911 call. The solutions discussed in the contribution should be able to be migrated to meet the requirements for user-to-user GTT.

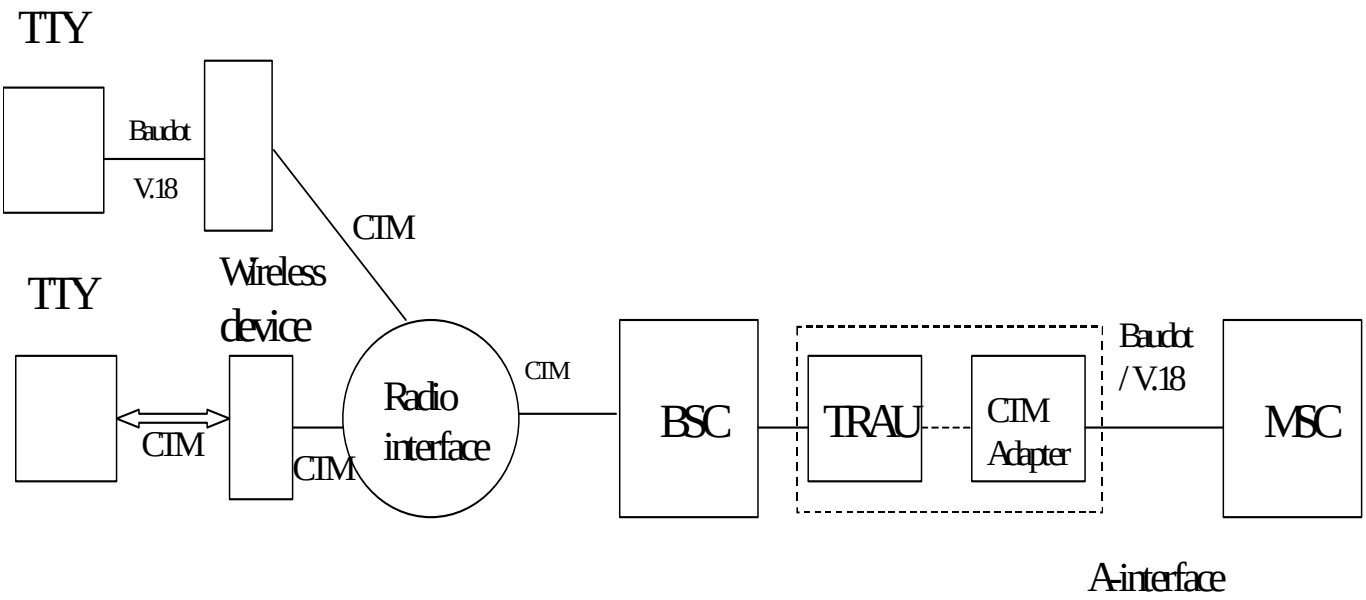
Possible solutions:

1. All transcoder (GSM and UMTS)
2. Transcoder pooling
3. CTM service node

1a - All transcoder solution (GSM)

Description

In this solution all the transcoders in a network are upgrade to support the CTM modem.



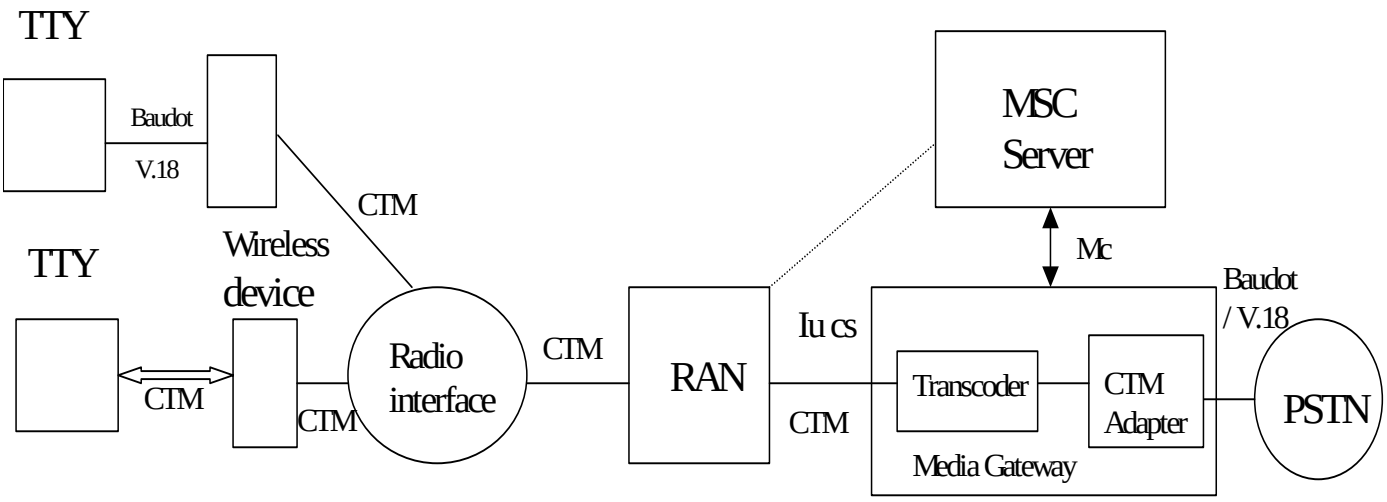
Main Issues

- Every transcoder in the network needs upgrading to support CTM

1b - All transcoder solution (UMTS)

Description

In this solution all the transcoders in a network are upgrade to support the CTM modem.



Main Issues

- Every transcoder in the network needs upgrading to support CTM

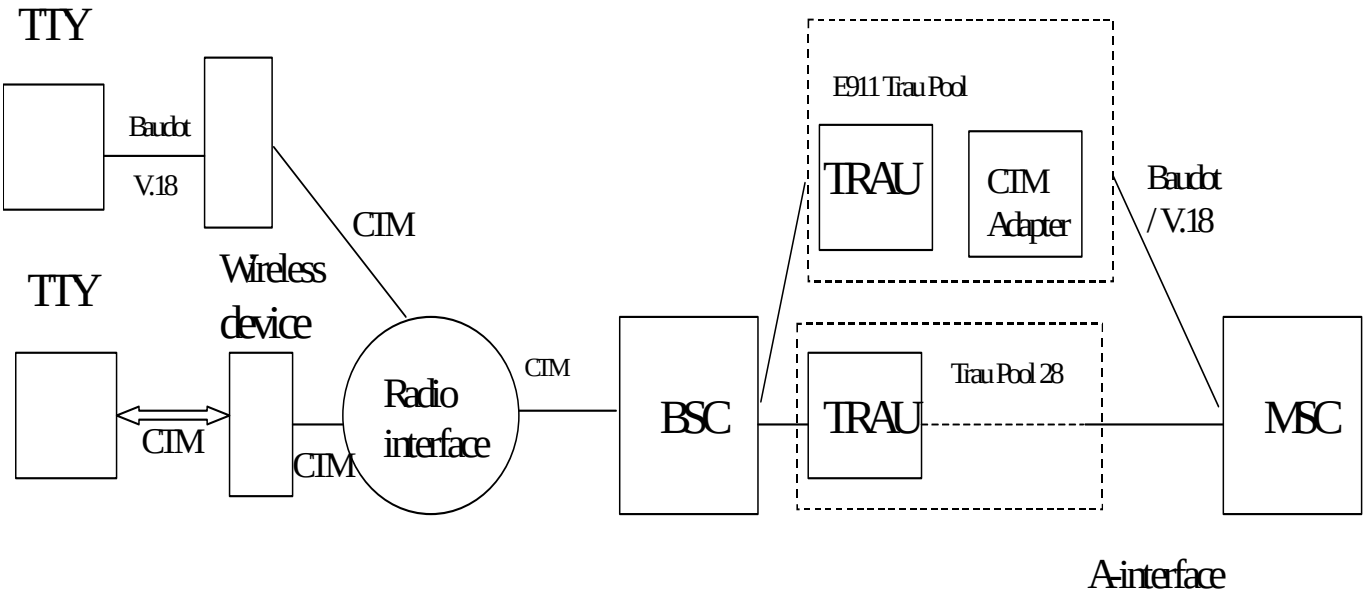
Specification Issues

- Update 08.02 and 23.002 with a general description
- Update 23.226 introducing CTM in all trau/transcoders

2 – Pooling of CTM Trau resources (GSM)

Description

In this solution a Trau pool is created which supports the CTM modem. All emergency calls are routed via a CTM (E911) Trau pool using standard techniques defined for trau pooling.



Main Issues

- Call Back – how to ensure that a return call from an emergency call centre is routed via the E911 trau pool - (possible solutions may be CLI identification of the emergency call centre in the MSC linking to the E911 trau pool or bearer capability information obtained from the mobile at call set up)
- 08.08 will need to be updated to show how this category of pool is supported.
- MSC needs to link the emergency call with access to the E911 trau pool.

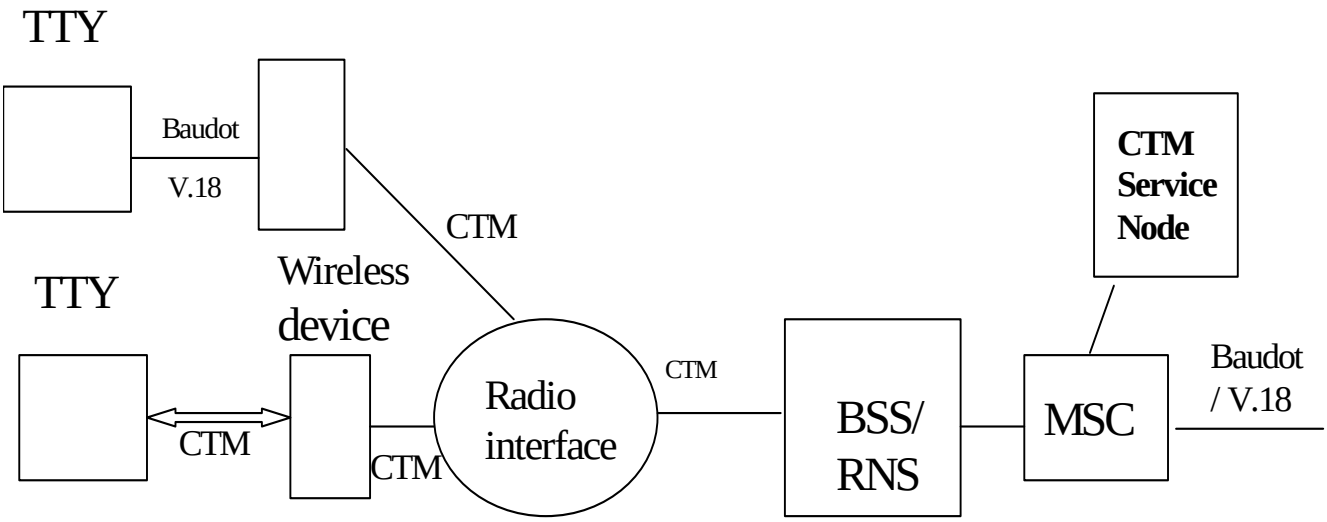
Specification Issues

- Update 08.02 and 23.002 with a general description
- Update 23.226 that all emergency calls are routed through the trau pool
- Update 08.08 defining a new circuit pool
- Update 24.008 putting in CTM code points in the bearer capability information elements for the call back case
- Update 23.226 CLI detection for call back from emergency centre for routing via CTM trau pooling

3 – CTM service node solution (GSM)

Description

In this solution all emergency calls are routed via a CTM service node before being routed to the emergency call centre.



Main Issues

- Call Back - how to ensure that a return call from a emergency call centre is routed via the CTM service node - (Possible solution may be CLI identification of the emergency call centre in the MSC linking to the call to CTM service node before call setup)
- Fault tolerant service node required since all emergency calls from the MSC(s) are being route via it.
- It will be complicated to synchronise echo cancelling, and speech enhancement, in the Trau with CTM usage, if needed.

Specification Issues

- Update 23.002 with a general description
- Update 23.226 that all emergency calls are routed through the CTM service node
- Update 23.226 CLI detection for call back at the GMSC or MSC for routing via the CTM Service Node